

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54379




December 8, 2009 11:27:45 AM



Page 2

Item ID:	D3304-041	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Tube Assembly					
Start Date:	08/12/2009	Start Qty: 20.00		Cust Item ID:		
Required Date:	16/12/2009	Req'd Qty: 20.00		Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	SA001216			21	6		
140  Small Fab Small Fab Small Fab	Small Fab Memo Debur	0.00 0.00				21	6		10/09/12/2
	<input checked="" type="checkbox"/> Drill as per Dwg D3304 using drill Jig D3304-T1 <input type="checkbox"/> Debur								
150  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	205 10/01/09			21			

(21) 12/09/12/22

(21)

12/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54379

December 8, 2009 11:27:45 AM



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Item ID: D3304-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Tube Assembly

Start Date: 08/12/2009 Start Qty: 20.00



Cust Item ID:

Required Date: 16/12/2009 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

Weld bracket as per Dwg D3304 and QSI 004 ✓

(21)**12/09/12/30**

170

0.00



QC

QC9- Inspect visual per QSI004- Fusion Welds

Memo

0.00

Quality Control

(21)**PD 10.01.04**

180

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

⇒ 5/10/01/04**located (21)****φ**

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Work Order ID 54379

December 8, 2009 11:27:45 AM

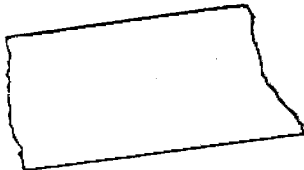


Page 4

Item ID:	D3304-041	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Tube Assembly					
Start Date:	08/12/2009	Start Qty:	20.00	Cust Item ID:		
Required Date:	16/12/2009	Req'd Qty:	20.00	Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 <i>M112588</i> Memo START TIME: <i>11:00AM</i> <input type="checkbox"/> OVEN TEMPERATURE: <i>11:30</i> <input type="checkbox"/> FINISH TIME: <i>3:00P</i>	0.00 <i>0.00</i>	<i>200</i>	<i>00101/05</i>		<i>(21)</i>	<i>0</i>		
200 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 <i>0.00</i>	<i>BR</i>	<i>10-01-5</i>		<i>(21)</i>	<i>0</i>		
210 Small Fab Small Fab Small Fab	Small Fab Memo Assemble lanyard and pip pin as per Dwg D3304	0.00 <i>0.00</i>				<i>EBK/01/06</i>	<i>(21)</i>		



W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Work Order ID 54379

December 8, 2009 11:27:45 AM



Page 5

Item ID: D3304-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Tube Assembly

Start Date: 08/12/2009 Start Qty: 20.00



Cust Item ID:

Required Date: 16/12/2009 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ / Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	------------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

220 QC5- Inspect part completeness to step on W/O

0.00



⇒ S1010106

QC

Memo

0.00

Quality Control

count
(x21)

d

230 Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

10/01/07 21

240 QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/01/07

Bl 10-1-07
(21)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December 8, 2009 11:27:48 AM

Page 1

Work Order ID: 54379

Parent Item: D3304-041

Parent Item Name: Tube Assembly


Start Date: 08/12/2009

Required Date: 16/12/2009

Comments:

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
CBL-1240  Cable		Purchased	No			100	Each	102.1380	20.8340			

EB 10/01/06

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

102.1379737

107234

102.137974

M304TR0.875W.065

Purchased

No

160

f

126.3000

28.2884

21.875



304 round tube .875 x .065w

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

MAT

126.3

110472

6.3

110680

120

BLBS-0016

Purchased

No

210

Each

24.0000

20.0000

27,563(5) - DJT 09/12/13



PIP PIN

10-1-5 2d. 50

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

24

109414

24

M113489 8X 10X

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 2

December 8, 2009 11:27:48 AM

Work Order ID: 54379



Parent Item: D3304-041



Parent Item Name: Tube Assembly

Start Date: 08/12/2009

Required Date: 16/12/2009

Comments:

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

CBL-460 		Purchased	No			210	Each	396.0000	40.0000			
Loop Sleeve										16-1-5 SL		

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	396	
111342	210	
113002	186	

D3304-5 		Manufactured	No			210	Each	6.0000	20.0000			
Bracket												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	6	
40907	6	

B54 446 → (21) ✓

6/10/09/12/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

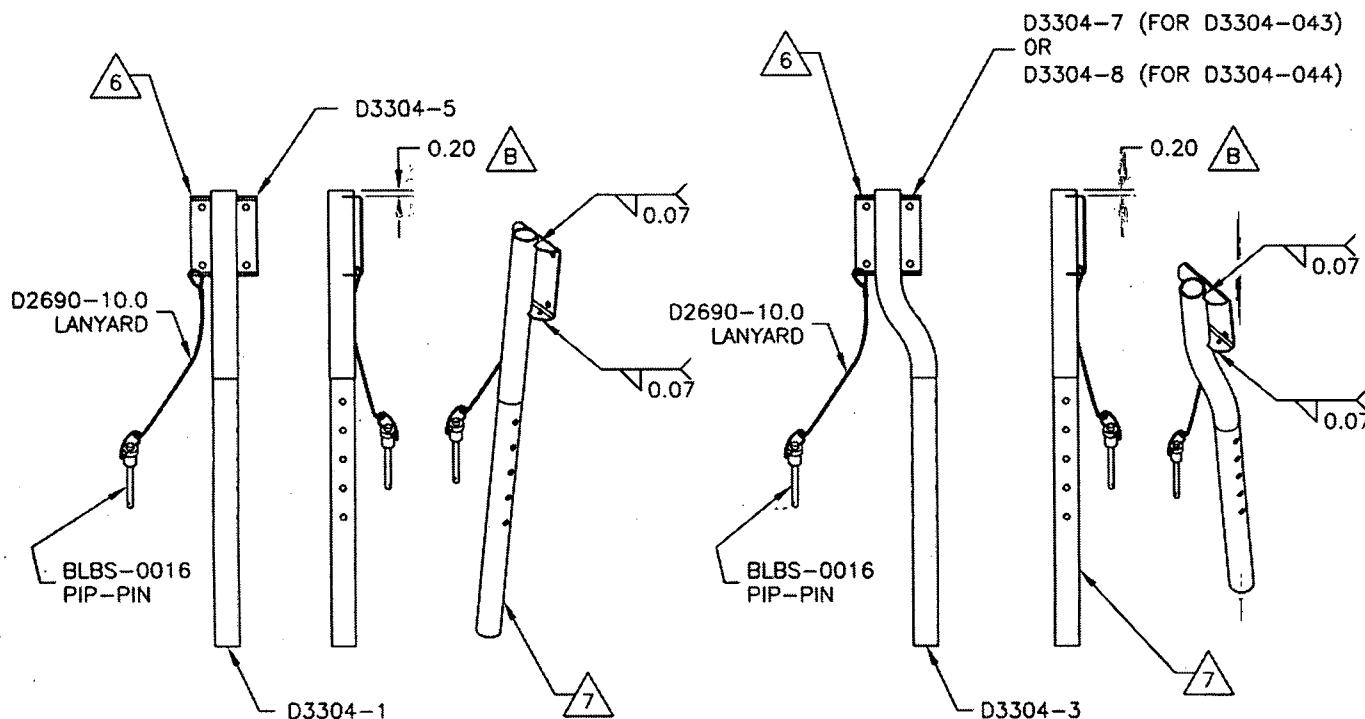
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	RF	DRAWN BY	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO. D3304
DATE	05.07.15	TITLE	TUBE ASSEMBLY	REV. B
A	04.08.18	SCALE	1:6	
B	05.07.15	NEW ISSUE	UPDATE DIMENSIONS: ADD D3304-7/-8	

**D3304-041 TUBE ASSEMBLY****D3304-044 TUBE ASSEMBLY (SHOWN)
D3304-043 OPPOSITE****D3304-041/-043/-044 NOTES:**

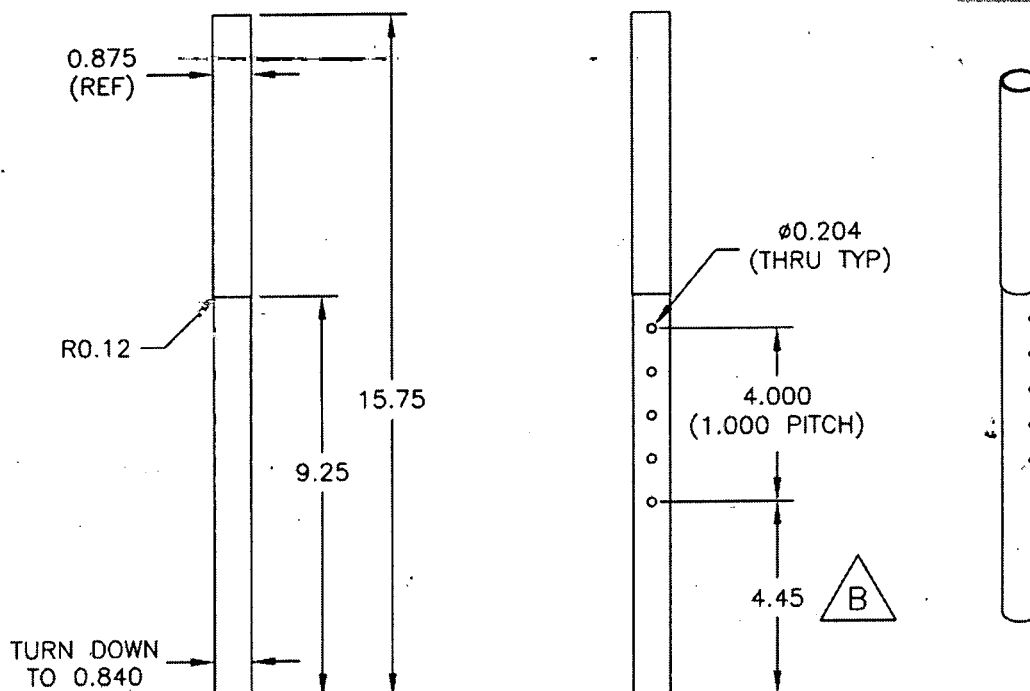
- 1) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 2) WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) IDENTIFY AS INDICATED USING FINE POINT PERMANENT INK MARKER "TCCA-PDA, DART AEROSPACE LTD, P/N D3304-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"
- 7) IF BEING ASSEMBLED WITH D3303-041, ADD THE FOLLOWING USING A FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D412-724-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

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ENGINEERING
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER NO. 57375
OK 04-12-5

DART

w/d 54379

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3304	REV. B SHEET 2 OF 4
DATE .05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4

RELEASED
05-08-11 H**D3304-1 TUBE****D3304-1 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE Ø0.875 x 0.065 WALL (REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

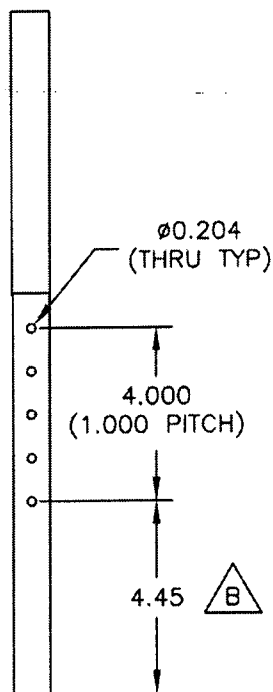
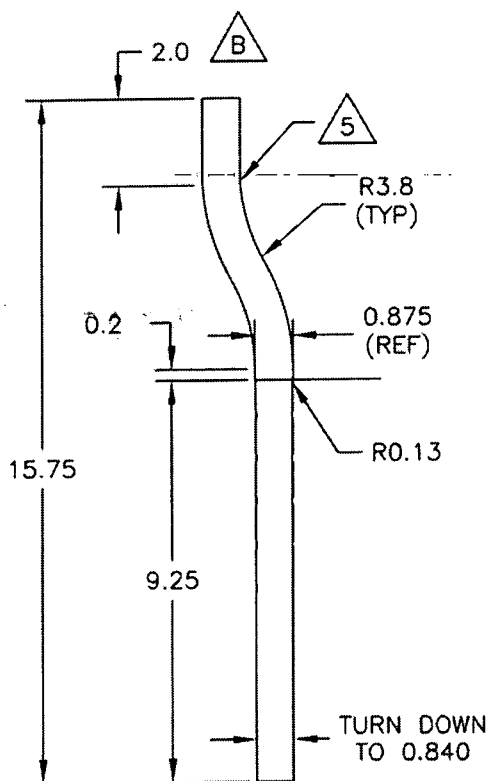
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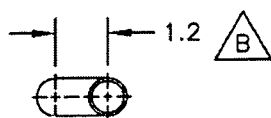
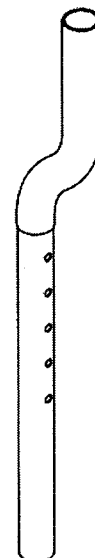


W/O 54329

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3304	REV. B SHEET 3 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4



RELEASED
05-08-11 *[Signature]*



D3304-3 TUBE

D3304-3 NOTES:

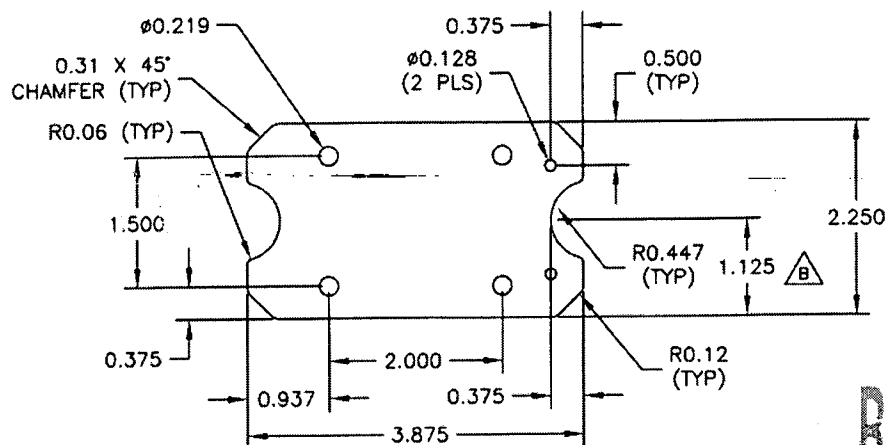
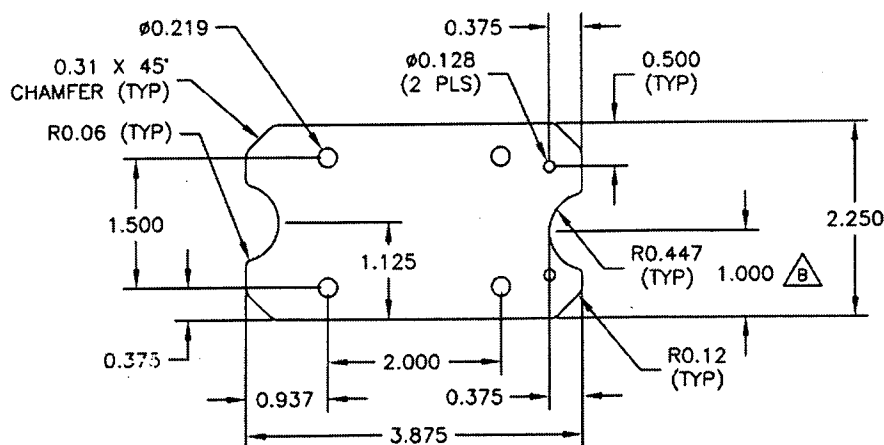
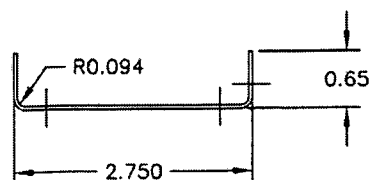
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE $\phi 0.875 \times 0.065$ WALL (REF. DART SPEC M304TRO.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) BEND LINES 9.625, 13.375 DIMENSIONS

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DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3304	REV. B SHEET 4 OF 4
DATE 05.07.15	TITLE TUBE ASSEMBLY		SCALE 1:2

**D3304-5 FLAT PATTERN****D3304-7/-8 FLAT PATTERN****D3304-5/-7 BRACKET
D3304-8 OPPOSITE****NOTES:**

- 1) MATERIAL: AISI 304/316 SS 0.040 THICK SHEET (REF. DART SPEC M304S20GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

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